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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/662,937	09/662,937 09/15/2000		Naoaki Kitagawa	PM 273286	1661	
909	7590	08/25/2003				
		HROP, LLP	EXAMINER			
P.O. BOX 10500 MCLEAN, VA 22102				VERSTEEG,	VERSTEEG, STEVEN H	
				ART UNIT	PAPER NUMBER	
				1753	1,	
				DATE MAILED: 08/25/2003	\mathcal{U}	

Please find below and/or attached an Office communication concerning this application or proceeding.

		<u>/ L</u>					
	Application No.	Applicant(s)					
Office Action Comments	09/662,937	KITAGAWA ET AL.					
 Office Action Summary 	Examiner	Art Unit					
	Steven H VerSteeg	1753					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed rs will be considered timely. I the mailing date of this communication. D (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on <u>07 A</u>	<u> August 2003</u> .						
2a) ☐ This action is FINAL . 2b) ☑ Thi	is action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims							
4)⊠ Claim(s) <u>1-3,9,11-17,20-23,30 and 32-38</u> is/ar	e pending in the application.						
4a) Of the above claim(s) 1-3,9 and 11-17 is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>20-23,30 and 32-38</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	r election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on 15 September 2000 is/a	re: a)⊠ accepted or b)□ objected	to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)⊠ All b)□ Some * c)□ None of:							
 1. ☐ Certified copies of the priority documents 	s have been received.						
2. Certified copies of the priority documents have been received in Application No							
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)	, ,						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)					

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DETAILED ACTION

Election/Restrictions

1. Applicant's election of claims 20-23, 30, and 32-38 in Paper No. 15 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- Claims 20-23, 30, and 32-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has amended claims 20 and 22 to include the limitations "having a homogeneous composition throughout a while thickness of said thin metal film and having a color similar to pure chrome", that a "single" target is used in a "nitrogen free vacuum atmosphere", and the target content. None of the limitations could be located in the specification as originally filed and are thus considered to be new matter. The new matter must be canceled. Claims 21, 23, 30, and 32-38 depend from claims 20 and 22 and contain all of the limitations of claims 20 and 22. Therefore, claims 21, 23, 30, and 32-38 are rejected for the same reasons as claims 20 and 22.

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The following is a quotation of the second paragraph of 35 U.S.C. 112: 4.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 20-23, 30, and 32-38 are rejected under 35 U.S.C. 112, second paragraph, as 5. being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- The term "pure chrome" in claims 20 and 22 is a relative term which renders the claims 6 indefinite. The term "pure" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.
- The term "arc-type" in claims 20 and 22 is a relative term which renders the claims 7. indefinite. The term "type" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is recommended that Applicant delete "type" from the claims.
- Claims 21, 23, 30, and 32-38 depend from claims 20 and 22 and contain all of the 8. limitations of claims 20 and 22. Therefore, claims 21, 23, 30, and 32-38 are rejected for the same reasons as claims 20 and 22.
- Claims 35-38 use improper Markush terminology. Applicant needs to amend the claims 9. to read "selected from the group consisting of" rather than "selected from" to overcome the rejection.

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Response to Amendment

10. All rejections of claims 1-3, 9, and 11-17 presented in the office action mailed January 30, 2003 are withdrawn in light of the election of claims 20-23, 30, and 32-38 in Paper #15.

11. All 103(a) rejections of claims 20-23, 30, and 32-35 involving US 6,068,890 to Käumle et al. (Käumle) in view of US 5,656,335 to Schwing et al. (Schwing) are withdrawn in light of the amendment to claims 20 and 22 to require that deposition to occur in "a nitrogen-free vacuum atmosphere". Käumle, while using two targets, specifically uses a nitrogen gas as a reactive gas for the atmosphere. Changing the atmosphere so that only titanium and aluminum are deposited (rather than a reactive nitrided layer) would require hindsight. Using only one target rather than two targets is obvious. The amendment to the claims to specify the atmosphere of the deposition to be "nitrogen free" is what differentiates the instant claims from Käumle. It should also be noted that the limitation that differentiates Käumle in view of Schwing from the instant claims is new matter.

General Information

For general status inquiries on applications not having received a first action on the merits, please contact the Technology Center 1700 receptionist at (703) 308-0661.

For inquiries involving Recovery of lost papers & cases, sending out missing papers, resetting shortened statutory periods, or for restarting the shortened statutory period for response, please contact Palestine Jenkins at (703) 308-3521.

For general inquiries such as fees, hours of operation, and employee location, please contact the Technology Center 1700 receptionist at (703) 308-0661.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H VerSteeg whose telephone number is (703) 305-4473. The examiner can normally be reached on Mon - Thurs (7:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X Nguyen can be reached on (703) 308-3322. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven H VerSteeg Primary Examiner Art Unit 1753

shv

August 21, 2003